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10/700,851

11/04/2003

Andrew C.P. Liu

TS01-1542

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10/06/2006

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EXAMINER

RADTKE, MARK A

ART UNIT

PAPER NUMBER

2165

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|----------------------------------|--|
| Office Action Summary | Application No. 10/700,851 | Applicant(s) LIU, ANDREW C.P. | |
| | Examiner Mark A. X Radtke | Art Unit 2165 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. In response to communications filed on 10 July 2006, claim(s) 1-26 is/are amended per Applicant's request. Therefore, claims 1-26 are presently pending in the application, of which, claims 1, 9, 14 and 22 are presented in independent form.

In light of Applicant's arguments, the earlier rejections under 35 U.S.C. 112 are withdrawn. Applicant's amendments have necessitated new rejections.

Claim Objections

2. Claim 21 is objected to because of the following informalities:
- a. If Applicant would like the claim trees of claims 1 and 14 to have identical structures, claim 21 should be modified to depend from claim 14.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. As to claims 1, 11, 14 and 24, the phrase "based on a change of position of a lot from a first equipment to a second equipment" renders the claims indefinite because the determination of changed records is already performed by "analyzing time and date stamp of the source database". The limitation is written in such a way that both the "analyzing" phrase and the "based on" phrase are attempting to modify the same phrase ("to determine"). As presented, the limitation does not parse grammatically. Examiner suggests rewording the limitation to indicate that both conditions must be satisfied, that either condition can be satisfied, or that the "based on" limitation flows from the timestamp-checking. Each of these interpretations is reasonable based on different readings of the claim. Furthermore, since no "base case" has been defined for the source database and no steps are recited for "changing" the database, it is impossible for the claimed invention to ever determine that a record has been modified. Therefore, these limitations also render the invention inoperable, the claims are also rejected under 35 U.S.C. 101. For the purposes of Examination, Examiner will assume that the "change in position of a lot from a first equipment to a second equipment" invokes a change in the time and date stamp in the source database. This interpretation was chosen because it resolves both the 35 U.S.C. 112 and the 35 U.S.C. 101 problems mentioned in this paragraph.

6. Claims 1, 11, 14 and 24 recite the limitation "time and date stamp" in line 4 (of claim 1). There is insufficient antecedent basis for this limitation in the claim. Databases do not inherently have time and date stamps. Furthermore, based on Examiner's best understanding of the specification, the time and date stamp is not a property "of the source database", but instead time and date stamps are associated with each entry in the database.

7. Dependent claims are rejected because they depend from rejected parent claims.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-26 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. See Examiner's comments regarding rejections under 35 U.S.C. 112. Dependent claims are rejected because they depend from rejected parent claims.

Claim Rejections - 35 USC § 102

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10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Burney (U.S. Pat. No. 4,829,445).

As to claim 1, Burney teaches a method of improving the performance of a relational database data reduction from a source database to a target database (see Abstract), comprising of:

analyzing time and date stamp (see column 53, lines 52-57, "Clock/Calendar") of the source database to determine if a record in said source database has been changed based on a change of position of a lot from a first equipment to a second equipment (see column 16, step 10);

in response to a determination that the record has been changed, locating the record based on an identifier of the lot (see column 16, step 10);

deleting the record from a target table of the first equipment in the target database (see column 16, step 11);

inserting the record into a target table of the second equipment in the target database (see column 16, step 3).

As to claims 2 and 15, Burney teaches wherein the target table of the first equipment includes at least one lot that is associated with the first equipment (see column 16, step 3).

As to claims 3 and 16, Burney teaches wherein the target table of the second equipment includes at least one lot that is associated with the second equipment (see column 16, step 3).

As to claims 4, 12, 17 and 25, Burney teaches wherein the analyzing step, the locating step, the deleting step and the inserting step are performed by a loader program (see column 7, line 62 – column 8, line 9).

As to claims 5 and 18, Burney teaches wherein the record in the source database that has been changed is no longer valid (see column 23, step 11).

As to claims 6 and 19, Burney teaches wherein the source database comprises a source table of the first equipment and a source table of the second equipment (see column 34, lines 22-34).

As to claims 7, 10, 20 and 23, Burney teaches wherein the source table of the first equipment is synchronized with the target table of the first equipment, and wherein

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the source table of the second equipment is synchronized with the target table of the second equipment (see column 16, step 3).

As to claims 8 and 21, Burney teaches wherein the record in the target table can be exported to another database or software system (see column 106, lines 33-34, "utilizes a number of external utilities").

As to claim 9, Burney teaches a method for refining data replication between a source database and a target database (see Abstract), comprising of:

For the remaining steps of this claim, Applicant's is/are directed to Examiner's comments regarding claim 1.

As to claims 11 and 24, Burney teaches wherein the determining step comprises analysis of time and date stamps in said source database (see Examiner's comments regarding claim 1).

As to claims 13 and 26, Burney teaches wherein said loader program is capable of displaying on a central monitor a manufacturing equipment environment and a lot status (see column 100, lines 39-41).

As to claim 14, Burney teaches a system for improving the performance of a relational database data reduction from a source database to a target database (see Abstract), comprising of:

For the remaining steps of this claim, Applicant's is/are directed to Examiner's comments regarding claim 1.

As to claim 22, Burney teaches a system for refining data replication between a source database and a target database (see Abstract), comprising of:

For the remaining steps of this claim, Applicant's is/are directed to Examiner's comments regarding claim 1.

Response to Arguments

12. Applicant's arguments filed on 10 July 2006 with respect to the rejected claims in view of the cited references have been fully considered but are moot in view of the new grounds of rejection.

Additional References

The following patents have been cited for being relevant to the instant application but were not used in the prior art rejections. They are cited because they pertain to the art of manufacturing control systems in general:

| <u>Doc. No.</u> | <u>Assigned to</u> |
|-----------------|--------------------|
|-----------------|--------------------|

US 5369570 A Parad; Harvey A.
US 6000045 A Lewis; Lundy

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications should be directed to the examiner, Mark A. Radtke. The examiner's telephone number is (571) 272-7163, and the examiner can normally be reached between 9 AM and 5 PM, Monday through Friday.


If attempts to contact the examiner are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached at (571) 272-4146.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service at (800) 786-9199.

maxr

1 October 2006


FRANTZ COBY
PRIMARY EXAMINER